

MULTICOM PRO-XL MDX4600



Technical Specifications

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ENGLISH



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MULTICOM PRO-XL

Interactive reference-class 4-channel expander/gate/compressor/peak limiter with dynamic enhancer and low contour filter



- ▲ Switchable IKA (Interactive Knee Adaptation) program-adaptive compression circuitry combines the advantages of hard-knee and soft-knee characteristics
- ▲ IRC (Interactive Ratio Control) expander/gate circuitry for virtually inaudible noise suppression
- ▲ Switchable dynamic enhancer for brilliant, lively audio even with heavy compression
- ▲ IGC (Interactive Gain Control) peak limiting circuitry combines clipper and program limiter for reliable and inaudible protection against signal peaks
- ▲ Switchable low contour filter prevents “pumping” due to low-frequency dominated compression
- ▲ Stereo couple function selectable for channels 1/2 and 3/4
- ▲ Ultra low-noise 4580 operational amplifiers and state-of-the-art THAT® VCA's
- ▲ Separate 8-segment LED meters for input/output levels and gain reduction
- ▲ Selectable operating level (+4 dBu/-10 dBV)
- ▲ High-quality detented ALPS® potentiometers and illuminated switches
- ▲ Servo-balanced inputs and outputs with ¼" TRS and gold-plated XLR connectors
- ▲ Manufactured under ISO9000 certified management system

MDX4600

SPECIFICATIONS

AUDIO INPUTS

Type	XLR and 1/4" TRS connectors, HF-shielded, servo-balanced
Impedance	
+4 dBu	90 kΩ bal., 45 kΩ unbal. @ 1 kHz
-10 dBV	180 kΩ bal., 90 kΩ unbal. @ 1 kHz
Operating level	+4 dBu/-10 dBV (switchable)
Max. input level	+22 dBu balanced and unbalanced
CMRR	typ. 40 dB, >60 dB @ 1 kHz

AUDIO OUTPUTS

Type	XLR and 1/4" TRS connectors Electronically controlled servo-balanced output stage
Impedance	95 Ω bal., 50 Ω unbal. @ 1 kHz
Max. output level	+21 dBu, +20 dBm balanced and unbalanced

SIDECHAIN INPUTS

Type	1/4" TS connector, unbalanced, HF-shielded, DC-decoupled
Impedance	45 kΩ
Max. input level	+24 dBu

SIDECHAIN OUTPUTS

Type	1/4" TS connector, unbalanced, HF-shielded, DC-decoupled
Impedance	50 Ω
Max. output level	+21 dBu

SYSTEM SPECIFICATIONS

Bandwidth	20 Hz to 20 kHz, +0/-0.5 dB
Frequency range	0.35 Hz to 200 kHz, +0/-3 dB
S/N ratio	115 dB, unweighted, 22 Hz - 22 kHz
THD	0.008 % typ. @ +4 dBu, 1 kHz, gain 1 0.07 % typ. @ +20 dBu, 1 kHz, gain 1
IMD	0.01 % typ. SMPTE
Crosstalk	-110 dB @ 1 kHz

EXPANDER/GATE SECTION

Type	IRC (Interactive Ratio Control) expander
Threshold	variable (OFF to +10 dB)
Ratio	variable (1:1 to 1:8)
Attack	<1 msec/50 dB, program-dependent
Release	variable SLOW: 100 msec/1 dB, FAST: 100 msec/100 dB

COMPRESSOR SECTION

Type	IKA (Interactive Knee Adaptation) compressor
Threshold	variable (-40 to +20 dB)
Ratio	variable (1:1 to ∞:1)
Attack/release	variable (manual or automatic)
Auto characteristic	wave adaptive compressor
Manual attack time	variable (0.3 msec/20 dB to 300 msec/20 dB)
Manual release time	variable (0.05 sec/20 dB to 5 sec/20 dB)
Auto attack time	typ. 15 msec for 10 dB, 5 msec for 20 dB, 3 msec for 30 dB
Auto release time	program-dependent, typ. 125 dB/sec
Output	variable (-20 to +20 dB)

PEAK LIMITER SECTION

Type	IGC (Interactive Gain Control) peak limiter
Level	variable (0 dB to OFF (+21 dBu))
Ratio	∞:1
Level 1 limiter type	clipper
Attack	"zero"
Release	"zero"
Level 2 limiter type	program limiter
Attack	program-dependent, typ. <5 msec
Release	program-dependent, typ. 20 dB/sec

DYNAMIC ENHANCER SECTION

Type	IDE (Interactive Dynamic Enhancer)
Filter frequency	2.5 kHz (lower cut-off frequency)
Characteristic	high-pass filter (6 dB/oct.)
Boost	max. 28 dB @ 7.5 kHz

POWER SUPPLY

Mains voltage	USA/Canada 120 V ~, 60 Hz U.K./Australia 240 V ~, 50 Hz Europe 230 V ~, 50 Hz
General export model	100 -120 V ~, 200 -240 V ~, 50 - 60 Hz
Power consumption	max. 18 W
Fuse	100 -120 V ~: T 630 mA H 200 -240 V ~: T 315 mA H
Mains connection	standard IEC receptacle

DIMENSIONS/WEIGHT

Dimensions	approx. 1 3/4" (44.5 mm) x 19" (482.6 mm) x 8 1/2" (217 mm)
Weight	approx. 2.25 kg (4.96 lbs)
Shipping weight	approx. 3.45 kg (7.61 lbs)

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